

# Preface

Autism is a major, debilitating neurodevelopmental disorder with shared genetic and environmental etiologies and a rising prevalence. Since the initial discovery of this disorder by Leo Kanner, there has been an explosion of new knowledge about its etiopathogenesis. *The Molecular Basis of Autism* provides the current state of knowledge about the etiology and treatment of this disorder. In the following twenty chapters, various contributors present up-to-date discussions of the state of knowledge on important aspects of autism. In part one of the book, chapters cover clinical topics of interest such as history of discovery of autism, diagnostic features, epidemiology, genetics, epigenetics, immunology, neuroimaging, neuropathology, pharmacology and behavioral treatment modalities. In part two, chapters deal with involvement of a number of neurotransmitters, proteins, and brain markers that may influence etiopathogenesis of autism such as dopamine, glutamate, serotonin, oxytocin, vasopressin, acetylcholine, Reelin, gamma-aminobutyric acid (GABA), fragile X mental retardation protein (FMRP), neurexins and neuroligins, neurotrophins, as well as novel mechanisms of disease production such as cognition and motor control and oxidative stress and mitochondrial dysfunction in causation of autism. It is hoped that this timely collection of chapters will provide a comprehensive guide for scientists and clinicians regarding the biology of this disorder.

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